2009 International Fuel Gas Code (IFGC)
City of Norman and State of Oklahoma-Uniform Building Code Amendments

** Note to users of this code: Please review the City of Norman (CoN) amendments and State of Oklahoma (OK) amendments listed below (4 pages total) before viewing the code and consider the amendments as they pertain to your area of interest. Feel free to contact a member of the City's Development Services Division if you have any questions about the code or any of the amendments.**

Sec.5-210. Adoption of the 2009 International Fuel Gas Code as adopted by the Oklahoma Uniform Building Code Commission pursuant to 59 O.S. 1000.23.

(a) Adoption includes all of the Appendices, which are:

(1) Appendix A regarding Sizing and Capacities of Gas Piping;

(2) Appendix B regarding Sizing of Venting Systems serving Appliances equipped with Draft Hoods, Category 1 Appliances, and Appliances listed for Use and Type B Vents; and

(3) Appendix C regarding Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems.

(b) Amend, delete or substitute within the following sections as indicated:

(1) Delete the Preamble referenced in Title 748:20-11-6 from the International Fuel Gas Code as amended and adopted by the Oklahoma Uniform Building Code Commission pursuant to 59 O.S. 1000.23;

(2) Chapter 3, GENERAL REGULATIONS, Section 305 INSTALLATION, Section 305.3 Elevation of ignition source. After "above the floor" add "surface on which the equipment or appliance rest";

(3) Chapter 3, GENERAL REGULATIONS, Section 306 ACCESS AND SERVICE SPACE, Section 306.3 Appliances in attics. Exception: 2 delete "the passageway shall be not greater than 50 feet (1520 mm) in length." and replace with "or where not more than 20 feet length of the passageway is a minimum 30 inches high and 22 inches wide, the entire passageway shall be not greater than 50 feet in length.";

OK:748:20-11-7. IFGC® Chapter 3 General Regulations

Chapter 3 of the IFGC® 2009 is adopted with the following modifications:

(1) Section 307.2.1 Condensate drains. This section has been added to the code to require condensate drains to be protected from freezing. This section shall read: Where condensing appliances are in locations subject to freezing conditions, the condensate drain line must be protected from freezing in an approved manner and in accordance with manufacturer installation instructions.

(2) Section 308.1 Scope. This section has been modified to include gypsum board as a combustible material. This section has been modified to read: This section shall govern the reduction in required clearances to combustible materials, including gypsum board, and combustible assemblies for chimneys, vents, appliances, devices and equipment. Clearance requirements for air-conditioning equipment and central heating boilers and furnaces shall comply with Section 308.3 and 308.4.

(3) Section 310.1.1 CSST. This section has been modified to add an exception to allow for installation when using new special CSST. This exception shall read: Exception: Special corrugated stainless steel gas products or systems that have been designed, manufactured and listed for installation without direct bonding shall be permitted to be installed in accordance with the manufacturer's installation instructions.

OK:748:20-11-8 IFGC® Chapter 4 Gas Piping Installations

Chapter 4 of the IFGC® 2009 is adopted with the following modifications:

(1) Tables 402.4(6), 402.4(7), 402.4(8), 402.4(9), 402.4(10), 402.4(11), and 402.4(12). These tables have been stricken from the code.

(2) Section 404.8.1 Insulated union on building riser. This section has been added to the code as a means to isolate the gas piping from the grounding. It shall read: All underground gas piping systems shall have an insulated union installed above ground level before the service enters the building.

(3) Section 404.10. Minimum burial depth. This section has been modified to change the minimum burial depth from 12 inches (305 mm) to 18 inches (457 mm) and to allow for an exception when there is no ability to meet that minimum depth. This section has been modified to read: Underground piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade, except as provided for in Section 404.10.1. Exception: Where a minimum depth of 18 inches (457 mm) of cover cannot be provided, the pipe shall be installed in conduit or bridged (shielded).

(4) Section 404.10.2. Separation of gas piping from other piping systems. This section has been added to the code as a means to prevent damage to other systems that may have been buried in the same ditch. This section shall read: Gas pipe and any other piping systems shall be separated by 18 inches (457 mm) of undisturbed or compacted earth.

(5) Section 404.16 Prohibited devices. This section was modified to add a second exception to allow for new technology to be utilized. The second exception shall read: An approved fitting or device where the gas piping system has been sized to accommodate the pressure drop of the fitting or device.

(6) The International Code Council Emergency Amendment dated September 27, 2010 has been adopted. This amendment replaces in its entirety Sections 406.7 through Section 406.7.3 of the IFGC®. These sections shall now read:

(A) Section 406.7 Purging: The purging of piping shall be in accordance with Sections 406.7.1 through 406.7.3

(B) Section 406.7.1 Piping systems required to be purged outdoors. The purging of piping systems shall be in accordance with the provisions of Sections 406.7.1.1 through 406.7.1.4 where the piping system meets either of the following:

(i) The design operating gas pressure is greater than 2 psig (13.79 kPa).

(ii) The piping being purged contains one or more sections of pipe or tubing meeting the size and length criteria of Table 406.7.1.1

(C) Section 406.7.1.1 Removal from service. Where existing gas piping is opened, the section that is opened shall be isolated from the gas supply and the line pressure vented in accordance with Section 406.7.1.3. Where gas piping meeting the criteria of Table 406.7.1.1 is removed from service, the residual fuel gas in the piping shall be displaced with an inert gas.

(D) Table 406.7.1.1 Size and length of piping. The following measurements for table 406.7.1.1 were added. Footnote “a” in relation to Nominal Pipe Size (inches) states CSST EHD size of 62 is equivalent to nominal 2-inch pipe or tubing size.
(i) When nominal pipe size (inches) is greater than or equal to 2 ½ but less than 3, the length of piping (feet) is greater than 50.
(ii) When nominal pipe size (inches) is greater than or equal to 3 but less than 4, the length of piping (feet) is greater than 30.
(iii) When nominal pipe size (inches) is greater than or equal to 4 but less than 6, the length of piping (feet) is greater than 15.
(iv) When nominal pipe size (inches) is greater than or equal to 6 but less than 8, the length of piping (feet) is greater than 10.
(v) When nominal pipe size (inches) is greater than 8, the length of piping (feet) is any length. For SI: 1 inch is equal to 25.4 mm; 1 foot is equal to 304.8 mm.
(E) Section 406.7.1.2 Placing in operation. Where gas piping contains air and meeting the criteria of Table 406.7.1.1 is placed in operation, the air in the piping shall first be displaced with an inert gas. The inert gas shall then be displaced with fuel gas in accordance with Section 406.7.1.3.
(F) Section 406.7.1.3. Outdoor discharge of purged gases. The open end of a piping system being pressure vented or purged shall discharge directly to an outdoor location. Purging operations shall comply with all of the following requirements:
(i) The point of discharge shall be controlled with a shutoff valve.
(ii) The point of discharge shall be located at least 10 feet (3048 mm) from sources of ignition, at least 10 feet (3048 mm) from building openings and at least 25 feet (7620 mm) from mechanical air intake openings.
(iii) During discharge, the open point of discharge shall be continuously attended and monitored with a combustion gas indicator that complies with Section 406.7.1.4.
(iv) Purging operations introducing fuel gas shall be stopped when 90 percent fuel gas by volume is detected within the pipe.
(v) Persons not involved in the purging operations shall be evacuated from all areas within 10 feet (3048 mm) of point of discharge.
(G) Section 406.7.1.4. Combustion gas indicator. Combustion gas indicators shall be listed and shall be calibrated in accordance with the manufacturer’s instructions. Combustion gas indicators shall numerically display a volume scale from zero percent to 100 percent in 1 percent or smaller increments.
(H) Section 406.7.2 Piping systems allowed to be purged indoors or outdoors. The purging of piping systems shall be in accordance with the provisions of Section 406.7.2.1 where the piping system meets both of the following:
(i) The design operating gas pressure is 2 psig (13.79 kPa) or less.
(ii) The piping being purged is constructed entirely from pipe or tubing not meeting the size and length criteria of Table 406.7.1.1
(I) Section 406.7.2.1 Purging Procedure. The piping system shall be purged in accordance with one or more of the following:
(i) The piping shall be purged with fuel gas and shall discharge to the outdoors.
(ii) The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through an appliance burner not located in a combustion chamber. Such burner shall be provided with a continuous source of ignition.
(iii) The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through a burner that has a continuous source of ignition and that is designed for such purpose.
(iv) The piping shall be purged with fuel gas that is discharged to the indoor or outdoors, and the point of discharge shall be monitored with a listed combustible gas detector in accordance with Section 406.7.2.2. Purging shall be stopped when fuel gas is detected.
(v) The piping shall be purged by the gas supplier in accordance with written procedures.

(J) Section 406.7.2.2 Combustible gas detector. Combustible gas detectors shall be listed and shall be calibrated or tested in accordance with the manufacturer's instructions. Combustible gas detectors shall be capable of indicating the presence of fuel gas.
(K) Section 406.7.3 Purging appliances and equipment. After the piping system has been placed in operation, appliances and equipment shall be purged before being placed into operation.
(7) Section 410.4 Excess flow valve. This section has been added to allow for new technologies in use in the field. This section shall read: Where automatic excess flow valves are installed, they shall be listed for the application and shall be sized and installed in accordance with the manufacturer's instructions.

OK:748:20-11-9 IFGC® Chapter 6 Specific Appliances

Chapter 6 of the IFGC® 2009 is adopted with the following modifications: Section 621.4 Prohibited locations. This section has been modified to provide definitions for Groups A, E and I. This section has been modified to read: Unvented room heaters shall not be installed within occupancies in Groups A, E, and I. The location of unvented room heaters shall also comply with Section 303.3 (Use Groups A = Assembly, E = Educational and I = Institutional.